EM Fact Sheet

Ogden Air Logistics Center
Environmental Management Directorate
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Hill AFB, Utah 84056-5137

Wastewater Management

Purpose: This fact sheet is to inform you of the Wastewater Quality Program at Hill AFB and to promote best management practices within your organization.

Mission: The mission of the Hill AFB Wastewater Quality Program is to:

a. Ensure compliance with permits issued to Hill AFB under the Clean Water Act.
b. Publicize relevant regulatory issues and educate the workforce on best management practices (see list of BMP's on back).
c. Assist the Industrial Users in preventing the introduction of pollutants into the collection system that would pass through or interfere with the Hill AFB Industrial Waste Water Treatment Plant or with the North Davis County Sewer District (NDCSD) Publicly Owned Treatment Works (POTW).
d. Improve opportunities to recycle and reclaim wastewater and sludges.

Background: Hill AFB generates approximately 270 million gallons of industrial waste water annually through three permitted out-falls. The IWTP receives on average approximately 300,000 gallons per day of industrial wastewater from the buildings listed below. Hill AFB has been issued an Industrial Pretreatment Permit by NDCSD that regulates the quality of discharge water into the county sewer system for final treatment at a POTW. By Federal regulation, the wastewater discharged from the base must be compatible with sanitary wastewater and cannot cause interference or pass-through at the POTW.

Point of Contact: Ken Walter, 775-6920, Ken.Walter@hill.af.mil, or Sharon Stone, 775-6909, Sharon.Stone@hill.af.mil, Environmental Management Directorate, Compliance Division (EMC),

Program Assistance: Contact the POC or attend the monthly Waste Water Working Group meeting held on the second Wednesday of each month at 0800 in the Jim Vining Conference Room in Building 5.

Key Compliance Requirements:

- *Oil Water Separators* - Collected fuel, oil, grease, oily waste, solvents, cleaning compounds, corrosive materials, or other contaminants cannot be discharged to oil water separators. OWS's must be maintained by the owning organization in accordance with HQ USAF/CE Letter, *Oil/Water Separators Operations, Maintenance*, and Construction, dated 21 Oct 94., and the Hill AFB OWS Management Plan.
- *Management Responsibility* – IAW OO-ALC policy letter dated 2 Nov 98, all base personnel are responsible for ensuring that prohibited discharge of wastewater or materials containing toxic or hazardous substances to the sanitary or storm sewer systems does not occur. OO-ALC policy letter dated 15 June 98, requires that all wastewater discharges, other than continuous flow rinse waters, be reported. Permission to discharge batch wastewaters and other non-rinse water flows must be submitted in writing to Mr. Jon Owens, IWTP Process Engineer, CES/CEOI; cc: Mr. Ken Walter, EMC. Request should include waste characteristics, estimated volume, flow rate, and requested time for release. Permission must be granted prior to release.
- *Secondary Containment* – The pretreatment permit issued to Hill AFB by NDCSD requires that "each industrial user shall provide protection from accidental discharge to the sewer of prohibited materials". The Hill AFB *Spill Prevention Plan* states, "to minimize the impact of a spill…every attempt should be made to contain all spills before they reach the drains. Shock loads on the IWTP could cause it to exceed effluent limitations."
- *Changes, Modifications, or Elimination of Industrial Processes* – Per the permit, any change, modification, or elimination of an industrial process must be reported to the POC.

INDUSTRIAL WASTEWATER COLLECTION SYSTEM

SUMMARY OF BLDGS CONNECTED

FACILITY	DESCIPTION
1A	Hanger Annex
(1G)	Maintenance Hanger
5D	Instrument Overhaul Shop
5E	Elec Equip Rpr & Mfg
5M	Shop Instm Overhaul
25	Aircraft Maintenance Dock
30	Oxygen & Acetylene Storage
37H	Maintenance Hanger
39	Aircraft Maintenance Facility
40H	Training Maintenance Hanger
42	Maintenance Facility
43	Ops Maintenance Facility
45E	Maintenance Facility
45W	Maintenance Facility
48	Aircraft Paint Hanger
(50)	Weapon & Release Sys Shop
55	421st Combat AGE Team
56	34th Combat AGE Team
62	4th Combat AGE Team
100A	Photo Lab
100C	Vacant
100E	Science & Engineering Lab
100J	Paint Booths-Missile Repair
204	C-130 Hanger
205	Printed Circuit Bd MFG
206	Eng Research Test Facility
214C	Lab, PME
220	Aircraft Corrosion Control

222	Hush House
225	Aircraft Maintenance Hanger
227	Defuel/Refuel Maintenance
228	Defuel/Refuel Maintenance
233	Pre-Flight Test Maintenance
236*	Fuel Sys Maintenance
237	Aircraft Maintenance
238	Structural Rpr & Maintenance
257	Plastic Shop
260	Steam Plant
265	Chemical Milling
267	Carbon Repair
270	Aircraft Painting Hanger
279	Tubing Shop
281	Chemical Storage
286	Shop, Storage
287	Corrosion Control Util Stor
295N	Jet Engine Maintenance
503	Depot Production Facility
505	Plating Shop
505*	Scubber Containment Area
506	Acid/Caustic Tank Facility
507	Landing Gear Facility
507*	Bead Blast Dust Collectors
509	Aircraft Weapons Maintenance
510	Machine Shop
511	Investment Casting
514	Hazardous Waste Control
515	AGE Maintenance Facility
535	Hazardous Recycle Center
554	TTO Plant
558	Sodium Hydroxide Storage
567	Corrosion Control Facility
574*	Open Storage (Reserve)
575*	IWTP Compound
576	Fuel Systems Maintenance
577	Sludge Dewatering Facility
578	Aircraft Weapons Calib.
581	Aircraft Supt Equip Stor
588	AGE Storage Facility
589	Aircraft Engine Insp/Rpr
590	Maintenance Hanger
592N	Aircraft Generation Shop
597	Aircraft Maintenance Shop
847	Missile Transporter Rpr
911	Refuel Vehicle Shop
914	Petrol Ops Bldg
916	Snow Barn
5134	Power Check Pad
10049	AGE Fuel Station
10229*	C-130 Fuels Maintenance
10558	IWTP Carbon Columns
10559	IWTP Oil Sorbent Filters
10581	Batch Treatment Tanks
10744	Operable Unit 1
10757	Operable Unit 2
10901*	Engine Test Pad
10915*	Jet Fuel Fill stand
15090*	Aircraft Wash Rack
	Operable Unit 3

( ) Proposed Connection
*Collects Substantial Rainfall
No. Facilities presently connected: 78
Bldgs Disconnected: 259, 266, 268, 272, 273, 274, 275, 276, 595

Best Management Practices:

- Filter process solutions to increase life.
- Clean tanks, parts, racks and barrels to reduce the possibility of contaminating metal finishing solutions.
- Allow parts to hang above tanks to drain back into tanks and reduce dragout.
- Use wetting agents to reduce solution surface tension and minimize dragout.
- Regenerate spent baths.
- Use non-cyanide based solutions (i.e. chloride or sulfate based).
- Use trivalent instead of hexavalent chrome plating baths.
- Use counter-current rinse techniques.
- Use fog nozzles or spray rinses.
- Equip rinse tanks with flow control valves.
- Meter water usage in each rinse tank to control water usage.
- Use connectivity controllers to control water usage.
- Install drain boards between process and rinse tanks to reduce dragout.
- Install electrolytic recovery units to prolong rinse water life by removing metal contaminants.
- Consider recovery technologies such as ion exchange, reverse osmosis to recycle or reuse rinse waters.
- Use de-ionized rinse waters to reduce the volume of sludge generated.
- Segregate metal bearing and non-metal bearing waste streams.
- Optimize spray paint operations to reduce overspray.
- Use non-chlorinated solvents wherever possible.
- Dry sweep shop floors.
- During paint stripping, collect paint and solvent and do not discharge into the drains.
- Contain spills and prevent spills from entering the drains.
- Use non-phenolic based paint strippers.
- Close-loop cooling water systems with addition of a chiller to reduce water use.
- Do not discharge non-contact water into the industrial drain system.